reefs of the coral islands south of Pamban Pass, close by is a heap of the pretty Eyed-Cowry, and so on through the whole series of local shells that are attractive either because of their colour or their shape. And with them are always great heaps of thousands of the stony opercula of the Turban shells. The Tamil name for these is ambiliman, meaning "the disc of the moon."

The actual shells of Turbo, after the death of the occupants, are often appropriated by hermit-crabs; some of these are more at home on the beach above tide-mark than in the sea, and, in the Laccadive Islands, on turning big boulders in the screw pine serub along the beach a crowd of hermit-crabs usually make off in a flurry hiding their soft tails in Turban shells.

JAMES HORNELL.

Madras, 8th June 1922.

NO. XXX.—SOME INTERESTING SPECIMENS OF THE PIERID GENUS EUCHLE.

(With a test figure)



Among a collection of butterflies sent to the Zoological Survey of India last year for identification by Mr. G. E. Shaw were several specimens of two forms of the Pierid genus Euchlæ, one closely related to E. charlonia transcaspica and the other to E. belemia. The form related to transcaspica was originally thought to be a race of the form described by Bingham as Synchloe lucilla, (but which is now regarded as a race of E. charlonia), differing only in being quite white. It is, however, more closely related to transcaspica, differing mainly in size, its whiteness and the paleness of the underside of the wings and the conspicuousness of the marginal white markings on the upperside of the forewings. Mr. N. D. Riley has very kindly compared one of the specimens sent to me with the twentyfour examples of transcaspica in the British Museum and finds that it disagrees in these points from all of them. He writes that if there are many specimens exactly like the one I sent him they should receive a name, but though I have seen many specimens I have refrained from describing them as new as I hope Mr. Riley will do so himself. The object of the present note is merely to bring to the notice of the Society's members the fact that the butterflies mentioned here are apparently new, and to ask them if they have any specimens to send them to Mr. Riley at the British Museum, who will I think be pleased to name them.

The form related to *E. belemia* differs chiefly from the *forma typica* in its smaller size and the markings on the apex of the forewings and the underside of the wings. The apical area of the upperside of the forewings is almost entirely black, except for a small white spot near the costa and two ill-defined white dots. The apical area of the underside of the forewings is marked with yellowish* green stripes, which are considerably narrower than those of the typical

^{*} Under a leas the "yellowish green" stripes on the underside seem to me to be really blackish, with tiny yellowish-green scales superimposed.

form, and the stripe adjoining the termen is also much reduced and does not touch the margin. The underside of the hindwings is marked with similarly coloured stripes which are much narrower and lighter in colour than those of typical belemia. This form is either a new or a seasonal variety of *E. belemia*.

(See figure.)

The form of charlonia has been taken in South Persia by Dr. C. L. Digsby-Roberts, and Mr. G. E. R. Cooper of the Survey of India has also taken it from Turbal-i-Hindari to near Robat in Baluchistan, while his brother took it at Toba in Baluchistan in May, 1910. Dr. Roberts' and Mr. Cooper's specimens were all taken from February to May, 1918 and 1919. Mr. Cooper informs me that the form was very common round hill-tops and mounds. The form of belcmia was taken by Dr. Roberts in Guhra,* South Persia, in May, 1918. The typical form occurs in South Spain, North Africa, the Canaries, Asia Minor and Syria.

The Zoological Survey of India has two specimens of each of these forms and I believe Dr. Roberts and Mr. Cooper also possess examples of these butterflies.

CEDRIC DOVER,

Indian Museum, Calcutta, January 1922. F.E.S.

We submitted the above note to Lt.-Col. H. D Peile who wrote as follows:— "Euchlæ transcaspica, Stgr., seems to be the same form in Mesopotamia as in Persia; and E. belemia, E., is also very probably the same for both these regions.

Euchloe transcaspica, Stgr.

A male of the typical transcaspica (2nd generation) form, agreeing well with transcaspian specimens in the B. M., was taken by me on 11th April 1920, at Fathah, on the right bank of the Tigris on a small hill crest on the Jebel Hamrin range, at about 500 ft. elevation.

The 1st brood (Jan.-Feb.) has been named vernalis by Verity. Le Cerf records it from Danah Konh and says it is slightly intermediate.

The Summer form of transcaspica, Stgr., from N. Persia and Turkestan is more yellow than the Spring form.

Euchloe belemia, E.

In Mesopotamia this varies very much in size, and in the markings of the upper and undersides, with the season.

Capt. N. D. Riley has recently gone through a long scries of this taken by me in Mesopotamia in 1919, and selected from them a series of 81 specimens which are now incorporated in the National Collection.

The Wet season form (Jan.-March) have the black markings above very pronounced, the bases of both wings being black; and on the underside well defined, dark green bands broader than the white bands between them.

The Dry season form (Mar.-Apl.) has much less black above, and on the underside narrow, broken up green and yellow streaks between wider white portions; this form being also slightly the larger.

Five specimens indicated a partial third brood.

Both 'wet' and 'dry' forms were taken in perfectly fresh condition in the last week of March.

This seasonal variation is referred to more fully under this species in the article on "The butterflies of Mesopotamia" in Vol. XXVIII, No. 2, of the Society's Journal.

^{*} This locality is known to most Europeans as Gorha, but Dr. Roberts informs me that the correct Persian name is Guhra.